

METHOD AND SYSTEM OF ROUTING NETWORK-BASED DATA USING FRAME ADDRESS NOTIFICATION

Abstract of the Disclosure

A method and system for routing network-based data arranged in frames is disclosed. A host processor analyzes transferred bursts of data and initiates an address and look up algorithm for dispatching the frame to a desired destination. A shared system memory existing between a network device, e.g., an HDLC controller, working in conjunction with the host processor, receives data, including any preselected address fields. The network device includes a plurality of ports. Each port includes a FIFO receive memory for receiving at least a first portion of a frame. The first portion of the frame includes data having the preselected address fields. A direct memory access unit transfers a burst of data from the FIFO receive memory to the shared system memory. A communications processor selects the amount of data to be transferred from the FIFO receive memory based on the desired address fields to be analyzed by the host processor.

[illegible]